NOBUGS 2002 - New Opportunities for Better User Group Software

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This was the fourth of the approximately biennial NOBUGS meetings. For the benefit of the uninitiated, NOBUGS provides a forum in which both developers and users of computer software and techniques in those information technology areas relevant to scientific research, especially as employed at large-scale user facilities such as synchrotrons and neutron sources, can come together and present developments, discuss problems and evolve standards. Against a backdrop of rising geopolitical tensions, travel restrictions and increased security there were nonetheless 88 registered delegates present of which a healthy 39% were from Europe plus a few from Japan, Australia and South Africa. CCP13 was indirectly represented by Steve King and Geoff Mant.

Delegates were comfortably accommodated in the Holiday Inn at Gaithersburg, a short ride by NIST shuttle from the main campus. NIST provided a good venue, and thanks are due to the local organising team of John Barnes, Przemek Klosowski and Alan Munter for their hard work behind the scenes.

After a welcome by J Michael Rowe, Director of the NIST Centre for Neutron Research, the meeting kicked off with a keynote address from Roger Pynn (now UCSB, but until recently Director of LANSCE) entitled "Can Software be a Competitive Advantage for User Facilities?". Over the next two and a half days there were 8 oral sessions (2 on experiment control, 1 each on user tracking & remote collaboration, high-throughput crystallography, experiment simulation, data treatment, data formats & software development tools) totalling 43 presentations, and 2 discussion sessions (one on the NeXus data format and the other on issues facing the community). There was also a poster session throughout which attracted 29 contributions, one of them advertising CCP13 programs.

The ongoing development of the NeXus data format was undoubtedly one of the central themes of the meeting. The goal is to create a format that will facilitate the exchange of neutron and synchrotron scattering data between facilities, users and their institutions. It is being developed by an international team of scientists and computer programmers from the principle neutron and X-ray facilities around the world. NeXus uses the Hierarchical Data Format (HDF) which is portable, binary, extensible and self-describing. The NeXus data format defines the structure and contents of these HDF files in order to facilitate the visualisation and analysis of the data. More information can be found through the links below. Specific issues for Small-Angle Scattering are being discussed in the canSAS forum. Contributions from the community are always welcome.

Steve King, ISIS

Useful links:
http://www.ncnr.nist.gov/events/nobugs2002/schedule.php (includes links to abstracts)
http://lns00.psi.ch/nexus/ or
http://www.neutron.anl.gov/nexus/
http://hdf.ncsa.uiuc.edu/
http://www.ill.fr/lss/canSAS/main.html
http://www.isis.rl.ac.uk/LargeScale/LOQ/loq.htm